

# GENERATION OF FAST BUSY SIGNALS IN DATA NETWORKS

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## 5 ABSTRACT OF THE DISCLOSURE

A data network includes a calling device and a called device. When a request to make a connection from the calling device to the called device is received, a resource information system (RIS) coupled to a softswitch queries a model to determine if there are enough resources between the calling and called devices to make the connection at  
10 a predetermined level of quality of service (QOS). If so, the RIS informs the softswitch that the requested connection can be made. Otherwise, a fast busy signal is provided to the calling device. In one embodiment, the model provides the RIS information about network resources such as bandwidth and QOS factors. The model is updated when  
any of the resources described in it is reserved, released, or modified; thereby allowing  
15 the model to provide up-to-date resource information that can be used to make an informed decision on whether a connection at a predetermined level of QOS can be made.